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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,196	09/11/2003	Jeremy N. Shapiro	SUN-P9696	5772
57913 7590 08/07/2007 SUN MICROSYSTEMS, INC. c/o PARK VAUGHAN & FLEMING, LLP 2820 FIFTH STREET DAVIS, CA 95618			EXAMINER FAROUL, FARAH	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 08/07/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/660,196

Applicant(s)

SHAPIRO ET AL.

Examiner

Farah Faroul

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20 is/are allowed.
- 6) ☒ Claim(s) 21 and 25 is/are rejected.
- 7) ☒ Claim(s) 22-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The following Office Action is based on the amendment filed on August 1, 2007, having claims 1-25 and Figures 1-3.

### ***Drawings***

2. The drawings were received on August 1, 2007. These drawings are accepted by the examiner.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "the apparatus" in lines 3-4. There is no antecedent basis for this limitation in the claim. Applicant claims "a system" in line 1 of the claim, not "an apparatus".

### ***Allowable Subject Matter***

4. Claims 1-20 are allowed.

5. Claims 22-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The indicated allowability of claim 21 is withdrawn in view of the newly discovered reference(s) to Yeager and Francis. Rejections based on the newly cited reference(s) follow.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yeager et al. (US 2005/0086300 A1) in view of Francis et al. (US 5,331,637).

For claim 21, Yeager et al. discloses a subnet administrator (group membership authenticator) configured to receive requests to change the membership of the multicast group (paragraph 502, lines 1-7 wherein a group membership received joining requests from peers)

make a non-member into a Full or SendOnly member of the multicast group (paragraph 504, lines 1-14 wherein the group membership authenticator makes a non-member a Full member);

make a Full or SendOnly member into a non-member of the multicast group (paragraph 510, lines 1-8 wherein a Full member membership is cancelled and the Full member is turned into a non-member of the multicast group)

For claim 21, Yeager discloses the entire claimed invention except for a network node coupling the apparatus to a network; a subnet manager configured to update network nodes' routing tables when the routing tree is modified in response to a change in membership of the multicast group

Francis, from the same or similar group of endeavor, discloses updating the network node's forwarding tables in response to a change in the multicast group membership (see table in Figure 4 and column 4, lines 41-62).

Thus, it would have been obvious to someone of ordinary skill in the art to combine the network management method of Francis with the communication network of Yeager at the time of the invention. The network management method of Francis is implemented into the communication network of Yeager by updating the routing tables after group membership status change. The motivation to combine the network management method of Francis with the communication network of Yeager is that it provides an effective management method of network nodes in a multicast network.

For claim 25, Yeager discloses the entire claimed invention except for the network node is one of channel adaptor or network switch.

Francis, from the same or similar field of endeavor, teaches a core node (router 107 in Figure 6) coupling the apparatus to a network.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 21-25 have been considered but are moot in view of the new ground(s) of rejection. Claims 1-20 are allowed. The objections to claim 21 are withdrawn because applicant's arguments are persuasive.

### ***Conclusion***

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9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shimizu et al. (US 2006/0168104 A1) is cited to show a system pertinent to applicant's invention. Shimizu discloses a digital contents distribution system.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farah Faroul whose telephone number is 571-270-1421. The examiner can normally be reached on Monday - Friday 6:30 AM - 4 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

F. Faroul



8/6/07

**BRIAN NGUYEN**  
**PRIMARY EXAMINER**